

ON
TIC DOULOUREUX
AND OTHER
PAINFUL AFFECTIONS OF THE NERVES:
WITH
Suggestions for their Treatment
BY MEANS OF
THE ANEURALGICON.

ILLUSTRATED BY
NUMEROUS CASES, AND AN ENGRAVING OF
THE APPARATUS.

BY
C. TOOGOOD DOWNING, M.D., M.R.C.S.
FELLOW OF THE LOND. MEDICAL AND WESTMINSTER MEDICAL SOCIETIES;
LATE PHYSICIAN TO THE BLENHEIM-STREET DISPENSARY.

“E fumo dare lucem.”

LONDON:
JOHN CHURCHILL, PRINCES STREET, SOHO.
1849.



Digitized by the Internet Archive
in 2015

<https://archive.org/details/b21957204>

R33836

PREFACE.

IN December, 1848, I read a paper descriptive of the Aneuralgicon, before the Fellows of the London Medical Society, and cited a number of cases to prove its beneficial operation in painful affections of the nerves. An abstract of this appeared in *The Lancet*, of January 13, of the present year. Subsequent trial has further tested its value in such complaints.

There are hundreds of persons passing their lives in misery, from the torturing attacks of tic douloureux, who have given up all hopes of being cured.

The following suggestions are submitted to the profession, in the hope that their experience may accord with his own.

C. T. D.

42, *Great Russell-street,*

Bloomsbury.

November, 1849.

ON

TIC DOULOUREUX,

AND OTHER

PAINFUL AFFECTIONS OF THE NERVES.

THE term Neuralgia is now generally employed by medical men to describe a painful affection of the nerves of the human body. Derived from the Greek words *νεῦρον* and *ἄλγος*, it means, literally, *pain in the nerves*, as distinguished from inflammation or rheumatism of them. It may be defined, a more or less violent, thrilling agony, shooting along the course of a nerve at variable intervals.

As the nerves are distributed throughout the body, so may this derangement be seated in any part of the system. Thus we have neuralgia of the upper or lower extremities, of the hand or foot, or of the little finger. It may be seated in the neck or mamma, or run along the course of the supra-seapular, ilio-lumbar, or inter-

costal nerves. Physicians of the present day also assign it a place among the affections of the internal organs of the body, under the different titles of heptalgia, gastralgia, and nephralgia, when either the liver, the stomach, or the kidney, is attacked.

By far the most frequent seat of genuine neuralgia is the face. Here its characters are more distinctly marked than elsewhere—its ravages more perfectly agonizing. To this species of neuralgia, the term *tic douloureux* is generally understood to apply, although some persons object to its employment, as leading to no distinct idea of the nature of the disease.

It appears to me that there is some misunderstanding on this point. In many instances recorded, sensations were experienced by the patients which rendered the term not only expressive but admirable. My own observation is to the same effect, and therefore I consider *tic douloureux* a good distinctive name for that species of neuralgia seated in the face.

There are many reasons why the head and face should be especially obnoxious to attacks of neuralgia—the face more especially. The nerves of this part are large and abundant; they interlace freely with each other, forming:

networks of fibres; they run superficially beneath a thin and delicate skin, which is exposed to every vicissitude of temperature—for this part is rarely covered. The greatest varieties of heat and cold are thus allowed to act upon parts supplied with large nerves, and those allowedly the most sensitive in the body. Their close connexion with the sympathetic system and with the teeth has, doubtless, considerable influence also in producing the affection.

SYMPTOMS.—Genuine *tie douloureux* is characterized by a sudden accession of pain, of a sharp, spasmodic, plunging, lancinating kind, usually along the course of some well-known nerve. Sometimes it seems to proceed from a centre or focus—a point covered by the patient's finger—and to diverge from thence in all directions along the nervous fibrillæ. Again, it may dart rapidly along the course of the nerve, and return again in a contrary direction. The pain is usually of an intermitting character, going off as suddenly as it comes, without assignable cause. Frequently, also, there is only a partial remission of the symptoms, a slight, nervous ache being constantly present, with occasional paroxysms of intense agony.

When the pain is intermittent, the paroxysms will occasionally recur at fixed intervals, at a certain hour of the morning or evening, just as an ague: more commonly, the periods of intermission are uncertain. The most trifling cause will then bring on a paroxysm; the slightest movement of the jaw or tongue, or even a touch on the lip with a feather, are sufficient. Some patients are so sensitive to external impressions, that a draught of air on the side of the head affected, or the shaking of the floor, will induce a fit of excruciating agony. Even mental impressions are known to have proved sufficient exciting causes to this terrible malady.

The character and degree of pain vary much in different instances. In slight cases, it will be severe, but bearable: of a sharp, darting, lancinating kind; but in others, more severe, it will resemble successive electric shocks, or knives plunged into the cheek repeatedly. The agony is so intense at times, that language fails to convey an adequate idea of the suffering. All self-control is lost. The bravest and strongest men will throw themselves on the ground, and roar with anguish. The shrieks and cries of females are quite heart-rending. Possibly, no pain to which mortals are subject

exceeds that of severe tic douloureux. It is well known that insanity has been induced by repeated attacks of this formidable complaint.

Particular symptoms, also, will be noticed, which are dependent on the parts implicated in the disease. Thus, when the tic affects the ophthalmic branch of the fifth nerve, an increased secretion of tears will be noticed. An increased flow of saliva will often follow derangement of the second and third divisions of the same nerve. When the gustatory branch of the inferior maxillary is involved, that side of the tongue will be found dry and preternaturally white. During the paroxysms, a lady-patient of mine experienced sensations as if lines of light, which she compared to lightning or electricity, passed from the eye across the cheek to the jaw. What is still more curious, she assured me that she could distinctly see, at these times, the pupil of her own eye. The circle of the iris was illuminated in a beautiful manner by a zone of azure blue and dazzling light. When the portio dura and buccal branches of the trifacial are involved, the small muscles of the cheek and lips will be sometimes drawn aside, giving to the countenance a ghastly, distorted appearance. Occasionally,

spasmodic twitchings of the same muscles are observed, convulsing the face in a horrid manner. The distortion and suffering are sometimes so awful, that persons of the strongest nerves are unable to endure the sight. In one case of a lady who came under my care, the family medical attendant, although a gentleman of humanity and experience, declared that he could attend upon her no longer, so much were his feelings shocked by the harrowing spectacle of her sufferings.

There is generally but little external indication of disease. The colour of the skin is natural, perhaps a little paler. There is no increase of temperature. Rarely can any very prominent swelling of the part be discovered. A careful examination, however, of the locality will rarely fail to detect some morbid change. Thus I have noticed a decidedly increased prominence of the malar bone when the infra-orbital nerve was affected; a stiffness or hardness of the lower lip when the inferior maxillary was involved; and enlargement of the condyle of the lower jaw, with swelling and hardness of the parotid gland, when both the fifth and portio dura, or the latter alone, were apparently implicated. Some rigidity of the skin may also

generally be noticed along the whole course of the nerves diseased. The patients themselves describe this peculiar stiffness or numbness of the integument, which leaves as the case advances towards cure.

The *physiognomy* of tic douloureux is usually well marked, so that we are able to detect it at a glance. When the superior maxillary nerve is neuralgic, for instance, the face will be found sallow and pale, with a peculiar expression of anxiety and watchfulness on the countenance. During the paroxysm, the head is maintained motionless, the mouth half opened, with the lips prominent and fixed, while the saliva flows from them abundantly. The features are also more or less drawn towards the side affected. As the slightest motion will bring on fresh torment, the patient, if he speaks at all, speaks hurriedly, with bated breath, and looks the very picture of distress. Another characteristic symptom should not be omitted; I mean that peculiar twitching of the nervous fibril, which gives the idea to the patient of something *alive* under the skin, or of the *pendulum* of a clock, which goes *tic, tic, tic*. This I have noticed only in affections of the cheek.

The constitution rarely sympathizes much

with this painful malady. Very little general disturbance of the system will be noticed to accompany the most severe attacks. The pulse at the wrist is moderate and equable ; the action of the heart regular—no sympathetic or hectic fever is present ; the functions of the body are properly performed ; the secretions normal. When the contrary is observed, the true *tie douloureux* may be complicated with rheumatism or inflammation of the nerves.

DIAGNOSIS.—*Tie douloureux* is a disease comparatively rare. Many other painful affections of the face are liable to be mistaken for it. These it is of importance to discriminate, as the treatment depends on our judgment. Many persons tell you that they have had the *tie*, when, upon investigation of the symptoms, you find it has been something very different, and much more manageable.

The diseases with which it is liable to be confounded are: inflammation of the nerve, disease of the antrum and inferior maxilla, toothache, brow ague, and rheumatism of the face. Even *tie* itself is of two kinds, which differ much, not only in intensity, but in subjection to remedial agents. Dr. Elliotson has pointed out the distinction between the genuine

tic douloureux I have described above, and the more common but spurious kind, consisting of rheumatism of the nerve. This rheumatism may be inflammatory or not, and it may be both acute and chronic, just as rheumatism in any other part.

The symptoms of RHEUMATIC NEURALGIA are much the same as those of tic douloureux ; but it may be distinguished from it by its arising from cold, by the character of the pain, by there being more or less heat on the surface, and by the co-existence of rheumatism in other parts. Another mode of distinction may be drawn from the effect of remedies.

Ordinary *Rheumatism*, not confined to the nerves, or running particularly along their course, has been mistaken for, and called, tic douloureux. The distinction will be obvious on examination.

Acute INFLAMMATION OF THE NERVE, or *Neuritis*, is characterized by a severe burning, throbbing pain, along the course of the nerve. This is *continuous*, and is accompanied by much constitutional disturbance. The tongue is white, the urine turbid, and there is more or less sympathetic fever. Where situated superficially, the nerve itself is often found thickened

and prominent. When more deeply placed, the course of the nerve may be traced by a line of increased vascularity on the skin, and pressure over this part increases the suffering. Acute neuritis, therefore, may be distinguished from neuralgia by the character of the pain, its persistence, tenderness on pressure, and sympathetic fever. It is also a disease of much shorter continuance, leading quickly to a subsidence of the symptoms, or organic change. When the inflammation is of a chronic type, the diagnosis is much more difficult.

ODONTALGIA.—On account of the symptoms of true *tic douloureux* being imperfectly understood by the public, an immense number of persons fancy, or are told, they have this dreadful disease, when they are merely suffering from *toothache*. Pain of the face, resulting from carious teeth, is of a darting, throbbing character, somewhat similar to that arising from inflammation of a nerve. It differs from *tic douloureux*, inasmuch as the pain of the latter is generally infinitely more severe, is intermittent, and is accompanied by less disturbance of the system. Odontalgic pains, it is needless to say, are much more amenable to treatment.

HEMICRANIA.—This is what the French call

the *Migraine*. It is a neuralgie complaint, of frequent occurrence but of short duration, affecting the side and top of the head. I have known it intermit with tic douloureux in other parts of the body. It generally commences by a severe pain at the outer edge of the eyebrow, the parietal protuberance, or the lower part of the temple, and extends thence over the whole of that side of the head. The integuments become tender to the touch. The course of the disease is rapid and well marked. The pain, at first trifling, augments with celerity, preventing the patient's attending to the slightest occupation. Sometimes the least ray of light, or the slightest noise, is insupportable. After having distracted the patient in this way for twelve or twenty-four hours, the complaint generally entirely disappears, and refreshing sleep ensues. Its recurrence may be expected at an uncertain interval.

DISEASE OF THE ANTRUM.—This is a disease of the face which simulates tic douloureux of the second division of the fifth, so much as scarcely to be distinguished from it. It consists of inflammation or suppuration of the mucous lining of the maxillary sinus, arising from cold or the influenza. One side only may

be affected. The disease is characterized by severe pain situated at the top of the canine fossa. Occasional exacerbations arise, and even seem to radiate from a point below the orbit. There is yet no change in the temperature or colour of the skin. It has thus many points of similarity to infra-orbital neuralgia.

The history of the case may aid the diagnosis. Pressure over the infra-orbital foramen, and nerves there situated, produces no exacerbation of the symptoms. Pain is augmented in the deeper parts of the face upon blowing the nose. The pain is also constant—of a dull, throbbing kind, without those awful plungings which mark the attacks of tic. A careful examination of the parts is necessary to enable you to detect this insidious malady. Where I have suspected its existence, I have passed a probe at once into the antrum.

BROW AGUE.—There is only one species of tic douloureux that this complaint can be confounded with; I mean, Frontal Neuralgia. For this it may readily be mistaken, as the two diseases possess many points of similarity. Both are characterized by pain on the frontal region; both frequently arise from malaria; and both are more or less intermittent.

Brow ague consists of pain, coming on generally at certain fixed intervals, seated in the brow. A dull, heavy pain over the eye, extending sometimes to the temple and forehead. The conjunctiva is usually injected, and its veins especially tortuous and full. The tears flow abundantly. The paroxysm comes on apparently without exciting cause, gradually increasing in severity, and continues for a few hours. It then ceases spontaneously, to recur with the same violence after an interval. The fits generally come on at a certain hour daily, but sometimes they recur with tertian or quartan periodicity. It will be perceived, from this slight description, that brow ague bears considerable resemblance to frontal neuralgia. It may be distinguished, however, by the character and seat of the pain. This in brow ague is dull and heavy; in the other it is plunging, electric, and shooting. Here it is seated in various tissues; there, only in the nerves, along whose course it traverses.

VARIETIES.—It is inconsistent with the design of this essay to touch, much less to enlarge, upon the various interesting topics connected with nerve pain. It may be necessary to mention, however, that there are three or

four principal varieties of facial tic douloureux. These are dependent on the particular nerves implicated.

SUPRA-ORBITAL or FRONTAL TIC DOULOUREUX is seated in the forehead, over the eye, and extends to the temple, or even to the crown of the head. The chief locality of the affection is in the frontal branch of the first division of the fifth nerve. The pain usually commences at the supra-orbital notch or foramen, and follows the course of the nerve and its divisions over the superciliary ridge to the forehead. Sometimes it passes inwards to the orbit, affecting the ball of the eye and the lachrymal gland. In this case, vivid flashes of light are experienced, and there is an abundant flow of tears during the paroxysms. The attacks, in this species, are generally quite intermittent, and recur at fixed periods. This species of tic douloureux I have frequently met with, and found easily controllable.

SUBORBITAL TIC DOULOUREUX.—This is, perhaps, the most common variety of facial neuralgia, but by no means the least severe. It is chiefly seated in the terminal branches of the superior maxillary nerve, after emergence from the infra-orbital canal. It will be recol-

lected, that these branches are both numerous and large in size. They form also intimate connexions with the facial nerve at the upper part of the cheek, and on the malar protuberance. The focus of radiation is evidently at the infra-orbital foramen, just below the orbit. Sometimes the pain is confined to that spot, but more commonly it extends to the lower eyelid, the cheek, the side and alæ of the nose, and the upper lip. Accompanying or succeeding this, which may be called the superficial malady of this nerve, occasionally the neuralgia travels inwards through the bony canal to the deep-seated parts. In this way the antrum, the soft palate, and root of the tongue, become affected. Attacking the dental branches, agonizing pains are felt in the teeth, giving rise to the impression that caries of those organs has been the exciting cause of the attack. This mistake of the effect for the cause, leads often to the useless extraction of teeth in a sound condition. Sometimes the gums are tormented with the malady. I attended a lady, who used to point out a small spot in the roof of her mouth as the seat of the mischief.

When these deep-seated branches of the

second and third divisions of the fifth nerve are affected, the salivary glands are stimulated to increased secretion. Hence there is usually a dribbling from the mouth. During the paroxysm also, the lining membrane of the nostrils pours out an increased secretion. The muscles of the cheek and lips are also sometimes thrown into a state of spasm, giving rise to more or less distortion of the features.

MAXILLARY TIC DOULOUREUX.—This variety originates in the inferior maxillary nerve, and the point of radiation is the mental foramen. On this spot, the patient places his finger accurately.

Usually the disease takes an outward direction, attacking the trunk and branches of the mandibulo-labralis nerve. It follows its ramifications over the chin and lip, and extends itself, as the disease advances, to the facial and suborbital nerves. When the complaint is thus superficial, the lower lip is agitated, during the paroxysms, by a slight tremor. This is the most bearable and manageable form of the complaint. Often the disease takes a retrograde course, and passing inwards through the mental foramen, attacks the teeth of the lower jaw. When further advanced, the primary and

deep-seated branches of the inferior maxillary are affected. The gustatory nerve communicates the agony to the side of the tongue, while the muscular branches convey the morbid influence to the ear, the temple, and the cheek. Through them it will involve the other nerves, so that the whole side of the face and head may be affected. This is considered a rare form of neuralgia. The paroxysms are not at all regular in their accession, and I believe, when the more deeply-seated nerves are involved, there is never a perfect intermission.

These are the three principal varieties of tic douloureux of the *sensitive* nerve of the face. It has been much doubted whether the *motor* nerve can take on the same diseased action. From my own observations, I am firmly convinced that it can, and consider the following to be the symptoms of

TIC DOULOUREUX OF THE PORTIO DURA.—

Pain, of a convulsive, plunging character, on the side of the head and face, more especially in front of the ear. The patient places his finger over the stylo-mastoid foramen, and traces the course of the pain thence along one or all of the principal branches of this nerve. The whole head and neck feel in a state of numbness

and rigidity. Tightened cords appear to pass under the skin, and to thrill and jump upon the slightest motion. The head is held perfectly steady, as the least motion to one or the other side, or even forwards, will bring on a paroxysm. In addition, the muscles of expression are frequently brought into spasmodic action, so that the countenance is more or less distorted, and occasionally bright streams of light appear to the patient to course along the nerves, when they are convulsed by pain. The slightest touch is sufficient sometimes to induce this luminous current.

NATURE, OR PROXIMATE CAUSE, OF TIC DOULOUREUX.—This is a subject which is still involved in considerable mystery. Without entering here into the reasoning on which I found my opinion, I may state that I consider the disease to depend essentially on a morbid excitability of particular nerves, or even parts of nerves, leading to violent and painful *spasm* of their fibres. It may be strictly also a *local* disorder, not necessarily dependent on general or gastric derangement. The source of irritation may be in the immediate vicinity of, or at a distance from, the neuralgic focus. This local excitement of nerves may be produced in a

great variety of ways, which leads us naturally to the consideration of the

CAUSES OF TIC DOULOUREUX.—Without pausing to investigate those agencies, such as age, mode of life, &c., which weaken the nervous system, and thus *predispose* to attacks of neuralgia, let me briefly enumerate the *immediate causes* of this painful affection.

These may be divided into the *distant* and *local*; or those influencing the nerve by its sympathy with a distant organ, and those acting directly upon the nerve itself. Among the former should be placed derangement of the stomach and bowels, the presence of irritating matters in the primæ viæ, hæmorrhoids, strictures, and worms. Changes of temperature are fruitful sources of neuralgic pains. Many physicians believe that the great mass of cases arises from exposure to cold. This will be readily understood by those who consider how closely allied neuralgia is to inflammation and rheumatism, and what a shock the exposed nerves of the face must sustain when exposed to a snow-storm, when the body is heated. Extreme heat I have found also to be nearly equally productive of facial neuralgia. Of all domestic servants, cooks are most frequently

troubled with it. The irritability and red face of a cook are proverbial. Disease and preternatural growth of bone must now, doubtless, also be regarded as occasional exciting causes of the *douloureux*. (*See the case of Mrs. M.*) Sometimes it may originate also in disease of the brain. Although the notion has given rise to much abuse, caries of the teeth should by no means be disregarded as an exciting cause. Neither should we overlook the influence of malaria.

Various local agents, such as blows, cicatrices, tumours, *spiculæ* of bone, should be regarded as efficient exciting causes of this Protean malady. In fact, I conclude that there has always existed some local agent, to determine to the part the neuralgic irritation.

TREATMENT.—We come now to the consideration of a most important part of this treatise. To the public, especially that portion of it afflicted with this dire malady, it will possibly be by far the most interesting. Tic *douloureux* has been hitherto regarded almost as ineurable, beyond the skill of the physician. It is true that a great number of cases have been successfully treated, by one remedy and another. But still there are numerous

well-known instances, where the same drugs, and every other resource of medicine, have signally failed in allaying the excitement.

Many of these instances, as I have said, are well known, occurring among the nobility and aristocracy; but there are great numbers of persons in private life, who bear their sorrows in secret, and retain to their dying hour this enemy to their peace. Almost every person with whom I have spoken is acquainted with one or more people in this unhappy predicament. The number of those afflicted with this inveterate torment is much greater than is generally imagined.

The question, then, arises—Can the douloureux be cured? Can it be eradicated? I believe it can. I will not pretend to assert that cases may not occasionally arise which will defy all human skill; yet, in my opinion, the greater number might be cured—certainly their sufferings might be considerably alleviated. It seems to me, that by determined perseverance in the plan of management I shall presently suggest, the most obstinate and long protracted cases might be conquered.

The principles of treatment resolve themselves into three chief indications:—1st, To remove the predisposing and exciting causes;

2nd, to avoid all possible sources of irritation; 3rd, to allay the morbid excitability of the nerves affected.

Removal of Causes.—Upon the removal of the cause, a complaint generally ceases spontaneously; the *vis medicatrix naturæ* completes the cure. This is not always the case with neuralgia; it is sometimes an exception to the general rule. Still, the cause or causes of tic douloureux should be sought after most diligently. Unfortunately, they cannot always, or even often, be discovered. In some rare instances, they cannot be removed, even when found out. Yet it is our duty, in the first place, to search for them. Our inquiries should be conducted with the greatest care and minuteness.

In the first place, we should search, in the immediate vicinity of the neuralgic focus, for the local exciting cause; and failing in discovering it, after the most rigid examination, we should extend our inquiries to more distant parts of the body. The state of the abdominal viscera and digestive functions should, undoubtedly, here claim our especial attention. In the same way, careful inquiry should be made as to the presence of hæmorrhoids, stricture of the urethra, disease or derangement of

the uterus, and leucorrhœa. Upon the removal of such sources of irritation, the disease will possibly be much mitigated in severity, and rendered more amenable to other treatment.

The second indication of treatment—namely, *to avoid all the usual causes of irritation*, is so obvious to common sense, that I should not allude to it, except that I know it is often entirely disregarded. Some persons, for instance, while under treatment for neuralgic pains, expose themselves to cold winds, and eat rich pastry, although these are among the best recognised excitants of the disease. They will submit to any remedy, however painful or disagreeable, rather than abandon their usual habits.

We now come to discuss the third indication in the treatment of the *douloureux*, which is—

To allay the morbid excitability of the nerves affected. This may appear, at first sight, to comprehend the whole treatment; but upon a little consideration will be found not to do so—at least, not in all cases. The removal of the cause will sometimes effect a cure. That, and attention to the general health, will often do so. But there are numerous other instances—in fact, the greater number—where the disease is not to be so lightly disposed of.

The great mass of cases of tic douloureux is made up of — 1st, those in which no obvious cause can be discovered; 2nd, those where a sufficient exciting cause can be detected, but cannot be removed: either from its irremediable nature, or from the obstinacy of the patient; 3rd, those wherein the irritability of the nerve continues after the removal of the cause.

What are the resources of art in such cases of confirmed neuralgia? They are manifold.

There is scarcely a drug in or out of the materia medica that has not been used in the treatment of this painful affection. Some of these have maintained a high reputation, and been vaunted as *specifics*. Now there is no real panacea for tic douloureux. There is no one drug that will cure all cases, or even the majority of cases. Yet it cannot be doubted but that several of these remedies are potent, and have been, occasionally, essentially serviceable. It is only when they are exclusively relied on that they disappoint the hopes of the sufferer.

They may be divided into the *general* and *local*; or those which act upon the disordered nerve by means of an impression made on the system, and such as, being applied directly to the part, allay at once the

topical irritation. Each class has been found, I believe, pretty nearly equal in efficacy. From my ideas of the essential nature of neuralgia, I cannot help thinking that local applications have been too much slighted. Although I would, by no means, like to trust to them alone, yet it seems to me that they may always be combined with general remedies with the greatest advantage. For this purpose, and with these views, I invented the *Aneuralgicon*. With it alone, as I shall presently show, I have cured several cases of obstinate tic douloureux, and when employed in conjunction with general remedies, the disease has yielded, although it resisted obstinately the latter by themselves.

The most powerful of the specific *general* remedies for tic douloureux are—carbonate of iron, disulphate of quinine, bark, arsenic, croton-oil, zinc, belladonna, henbane, nux vomica and strychnine, stramonium, aconite, cannabis indica, and the hydrocyanic acid: ether and chloroform should also be added to the number.

The *local* means at our disposal are various at the present day. They comprise blisters, the application of a strong solution of ammonia, and the moxa; stimulating ointments of the biniodide of mercury, and sedative

unguents of the vegetable alkaloids. Nor should I omit the *endermic* method of cure, consisting of the application of morphia, veratria, &c., to a blistered surface, or the still more recent *inoculation* of powerful drugs. Finally, I may allude to the practice of *dividing the nerve*, as a plan which is totally inapplicable to a great majority of cases.

These are the most approved weapons with which it has been usual to combat the enemy. It cannot be denied that sometimes one, sometimes another, has been employed with success. They are each, occasionally, of signal service. But still the great and discouraging fact remains, that in numberless instances they are utterly useless. They do not, as the saying is, touch the complaint. There are hundreds of persons now writhing in all the agony of *tic douloureux*, who have given a fair trial to nearly, perhaps quite, all these remedies, and numberless others. In illustration of the inefficacy of the most powerful and highly-prized of these specifics in certain cases, it may be mentioned, that a gentleman submitted without avail to the division of several of the nerves of his face, while a lady swallowed no less than *twenty-seven pounds* of the carbonate

of iron, and yet died the victim of neuralgia. Some more certain plan of treatment is required.

From considering tic douloureux as often a local disease, depending on a state of excessive irritability, sensibility, or spasm of a particular nerve, and observing the effect of topical sedatives, I was led to the conclusion, that the most direct way of quieting this state was by the application of *warmth and sedative vapour*—something to soothe the nerves and calm them into regular action. For this purpose I invented the Aneuralgicon, and it appears to answer the purpose admirably. I will now proceed to explain its nature.

DESCRIPTION OF THE ANEURALGICON.*

The Aneuralgicon is a name (compounded of α -νευρα-αλγος) applied to an instrument, used by me for the purpose of allaying pain in nerves. It is a kind of fumigating apparatus, in which dried herbs are burnt, and the heated vapour directed to any part of the body.

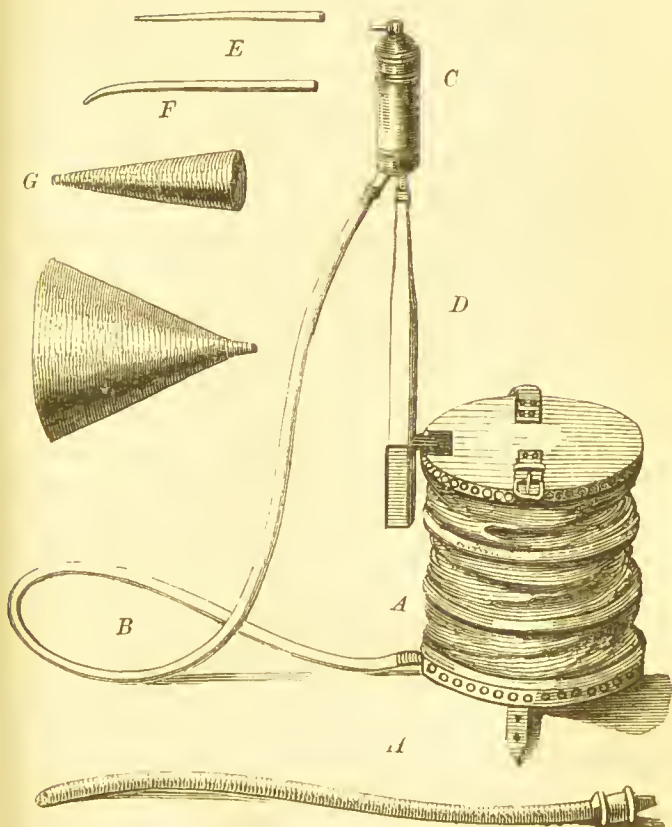
It is extremely simple in construction, and

* See engraving, page 29. The Aneuralgicon was manufactured by Mr. Matthews, of Portugal Street.

consists, essentially, of three parts, with their media of connexion—a *cylinder*, for igniting the vegetable matter; *bellows*, for maintaining a current of air through the burning material; and *tubes* and *cones* for directing the stream of vapour.

The *cylinder* (*C*) is a silver vessel, of a cylindrical shape, about two inches in length, and one inch in diameter. It has a metallic plate at the lower part, perforated with many holes, on which the burning materials lie. Beneath this is an opening for the admission of air, and a socket into which an ivory handle is made to screw. The dome-shaped lid, fitting accurately to the top of the vessel, allows the vapour to escape through an orifice and tube at the summit.

The *bellows* (*A*) consist of two plates of mahogany, of an oval shape, and about eight or nine inches in length. These are joined together by thin leather, maintained in its proper position by ribs at suitable distances. A strong spring is fixed in the interior, to keep the plates apart, and react against the pressure of the hand. A socket to hold the *ivory handle* (*D*) of the cylinder is fixed upon the upper plate, and a strong strap and buckle to fasten the



A, The bellows.
B, The India-rubber tube.
C, The cylinder.
D, Ivory handle of cylinder.

E, tube for meatus.
F, Curved tube.
G, *G*, Cones.
H, Uterus tube.

bellows together, when required for transport. The lower plate contains the valve, at the posterior part, for the admission of air, and the nozzle, at the anterior extremity, to afford it exit. A stout tube (*B*) of vulcanized India-rubber, about a yard long, connects the nozzle of the bellows with the lower orifice of the cylinder.

It will be seen from this description, that when these parts are united, and pressure is made on the upper plate of the air-vessel with the hand, a current of air passes through the nozzle of the bellows, along the caoutchouc tube, into the cylinder, and from thence escapes from the orifice at the top. So when any prepared vegetable material is put into the cylinder, and ignited, a stream of warm or hot vapour will pass out in the same direction.

The arrangements for applying this current are varied. One small *silver tube* (*E*) gradually tapers to a point, and is employed to inject the meatus auditorius, and other passages; another is curved at the end (*F*) for application to cavities and points of the mouth and palate; a third, (*H*) made of elastic material, is considerably larger and longer.

In order to apply the vapour with advantage

to a *surface*, *cones* of various sizes have been constructed. These are tubes, shaped like extinguishers, covered with leather, and lined with sheet lead. By this arrangement they retain the shape given them by the hand. These tubes and cones are, of course, adapted to the orifice at the upper part of the cylinder. In consequence of the length and flexibility of the caoutchouc tube connecting the bellows and cylinder, readiness of application to all parts of the body is insured.

The materials used in the aneuralgicon are chiefly the leaves, slender stalks, and seeds of plants. After carefully selecting the herbs, to ascertain their genuineness and purity, they are thoroughly dried by a gentle heat. Each leaf, if it be a large one, is then taken separately and rubbed between the hands, so as to break up the parenchyma into small fragments, from which all stalks and woody fibre should be excluded. Some roughly powdered cascarilla bark may then be added with advantage.

The plants I have chiefly employed have been those of the belladonna, henbane, cannabis indica or Indian hemp, tobacco, aconite, stramonium, hemlock, savine, digitalis, and a

few others. The seeds of henbane, colchicum, and cannabis, have also been added under certain circumstances.

The chief medicinal effects I have noticed in the use of this instrument are those of a sedative character. But the remedial influence of the aneuralgicon is not alone confined to the use of certain herbs. A considerable power is attributable to the warmth or intense heat generated. When the vegetable matter is ignited, and a current of air is made to pass through the burning mass, a small or great degree of heat can be produced at pleasure. Thus, when the hand is gently pressed upon the bellows, a mild, warm stream of vapour is poured forth, which may act as a douche to tender parts. But by strongly and rapidly compressing the same receptacle, the fire within the cylinder is urged, like that of a smith's forge, and the blast is intensely hot and burning. In this way any degree of rubefaction may be effected on a large or small surface, and by gradually augmenting the temperature, no bad substitute for the moxa is obtained. Thus we have in this aneurodyne apparatus the effects of heat and of medicated vapour; and each of these may be obtained singly, or combined together in regulated proportion.

In allaying the pain dependent on excessive irritability and excitability of particular nervous fibrils, the aneuralgicon will be found a most valuable auxiliary, sometimes a direct therapeutic agent. The effects of both gentle heat and sedative vapour combine to produce the cure.

I can speak with the more confidence of the power of this instrument in removing the painful affections of nerves, as I have now tried it in a considerable number of cases. It was from observing the benefit afforded in certain instances of such distressing maladies, that I named it the aneuralgicon, or pain-assuager. In obstinate facial neuralgia, or tic douloureux of many years' continuance, which had resisted every other kind of treatment,—that is, the ordinary routine remedies,—I have more than once been fortunate enough to cure the complaint in one or two sittings; several times by a few applications. And this without giving the patient any internal remedy. More often I have brought it in aid, as a local agent, of the approved resources of medicine. And this I have observed, that when the administration of drugs by the stomach, in full and persevering doses, has failed altogether in producing a

specific effect in allaying the local nervous excitement, the combined auxiliary use of the aneuralgicon has brought about a speedy cure.

Although most sanguine about the influence of this aneurodyne apparatus in treating faeial tic douloureux, I have, contrary to my expectation, found it available in neuralgia of other parts of the body. Thus many cases of seiatica have readily yielded to the application.

There are many other complaints that have more or less affinity to true tic douloureux, and which, in fact, can frequently scarcely be distinguished from it, that may be benefited by the same means, used with judgment. I allude more particularly to rheumatism of the scalp, hemierania, elavus hysterieus, and painful affections of the jaws; also to the cold kind of rheumatism, which is relieved by the application of heat, seated in various parts of the body. A stream of warm sedative vapour, poured into the external opening of the ear by means of the aneuralgicon, will often allay immediately the pain of otalgia. I have found it very servieeable in certain cases of nervous deafness, depending on excessive irritability of the parts; and its power of restoring a deficient secretion of cerumen is very great.

It should, however, be distinctly understood, that I by no means propose the aneuralgicon as an infallible specific for neuralgia, or pretend that it is applicable to all cases. Some discrimination and management will be required, and then, I believe, it will often be found to act *as a charm*, and generally serve as a useful auxiliary. The cause of the nervous excitement must be diligently sought after and removed; but in cases where this cannot be discovered, or, when found, cannot be dislodged, the pain may still frequently be effectually and even permanently allayed. It is satisfactory to add, that *no ill effect has ever followed its use*.

Among the numerous cases of tic douloureux, sciatica, &c., that have been treated by me, the following are selected in illustration of the beneficial employment of the aneuralgicon:—

CASE. *Tic Douloureux*. — Mrs. M. came under my notice on the 18th July, 1848. She is a married woman, eight-and-twenty years of age, residing in Ferry-street, Lambeth. Has been always weakly and delicate, subject to leucorrhœa and aphthæ; but has still borne five

children to her husband. Had one tooth drawn when sixteen years of age; but more have since been extracted, in consequence of earies, arising from medicines taken and applications made to the face, to alleviate the pain of neuralgia. The origin of the *tie douloureux* in this case is clear and satisfactory.

About six years ago, a friend sent her as a present, the *chop of a bear*. After eating this delicacy, she was picking the bone, when she fancied a little splinter of it ran into her jaw, on the upper part of the right side, just beyond the teeth. Most probably a tooth was broken, or the alveolar process injured. Be this as it may, immediately afterwards she says she felt a numbness and disagreeable sensation on both sides of the face. This subsequently subsided on the left side, but continued unabated on the right.

Two or three days after the accident, *great pain* came on up the right side of the face, extending from the lower jaw to the eye, and accompanied with *dribbling of saliva*. This continued for two years, with only slight intervals of rest.

The agony—which the patient describes as excruciating, at times occupying the whole

side of the head and face, and even extending down the neck—was so great, that she sometimes became raving, and her friends were obliged to have her strapped down in bed. Tried everything she could think of, to afford relief from the pain, and procure sleep. Took half a bottle of brandy sometimes on going to bed, and all kinds of sleeping draughts, with opium and morphia.

Mrs. M. at this time lived in Frith-street, Soho, and was under the care of several eminent practitioners. A great number of medical men, according to her account, prescribed for her at various times. She remembers that full six-and-twenty blisters were applied, among other plans of treatment, to parts of her body; the face, back of the neck, and the arm from the elbow to the shoulder. Morphia was frequently sprinkled over the blistered surface, and the sores were kept open for a considerable time. Very little, even temporary, relief followed.

Her funds being now well nigh exhausted by seeing the doctors, Mrs. M. became an out-patient at the Middlesex Hospital. From thence she went to the Westminster, and her torment still continuing, she was received into the University

College Hospital, under the care of Dr. Williams. This must have been about three years ago.

At this time the character of the pain had altered considerably. It was now *periodic*. It would tease a little all the day long, but about two or three o'clock in the morning it would come on awfully. The disease now yielded to treatment that had often been tried before without effect. Dr. Williams, she says, gave her tonic medicine, and prescribed generous diet, exercise, and amusement. Under this judicious management she greatly improved, so that she was able to leave the institution.

Mrs. M. continued nearly well, until she became in the family way in March twelve-month last, (1847.) The account she gives of this attack is as follows:—Two or three months after she found herself pregnant, a little blister appeared on the palate, and subsequently a fistulous opening showed itself. Soon afterwards, she says, she felt a little bit of something protrude from the orifice. This she gradually pushed back to the side of the jaw, and she fancies it is there now, lying loose under the mucous membrane. As soon as she had,

as she imagined, pushed this body back, she felt the pain come on excruciatingly. It was exactly as on the previous occasion. The agony *has continued ever since*. Nothing seems to quiet it. The treatment that was so successful before now affords no alleviation.

Mrs. M. was brought to me on the 18th of July, 1848, by Mr. Earles, a gentleman practising, I believe, in the Wandsworth Road. I made a careful examination of the face and jaws. There was no swelling or disfigurement externally. Upon opening the mouth, I at once perceived a large hole in the palatal plate of the superior maxillary bone of the left side. When a probe was introduced through this opening, it grated distinctly against denuded osseous matter. The edge of the palate bone on the right side was enlarged, but I could detect no loose bone beneath the lining membrane, as the patient intimated. The remaining teeth were sound, and the gums healthy. She was worn to a shadow with suffering.

Mr. Earles and I took the patient into King's College Hospital, to have the benefit of the opinion of Mr. Fergusson. That gentleman pronounced the vomer bone to be necrosed, and advised that nothing should be done until the

467

bone became loose. He could suggest nothing for the neuralgia.

On the 19th July, Mrs. M. came to my house, accompanied by Mr. Earles. She was then suffering the greatest agony. The pain seemed to originate in the second division of the fifth pair of nerves, but occupied also branches of the first and third portions. The facial nerve was also, apparently, implicated. She described the pain as darting, stabbing—as if knives were run into her. There was always a dull, aching pain, deep in the cheek and on the palate; but occasional exacerbations of intense suffering, extending from thence over the cheek, lower jaw, backwards to the ear, and upwards to the temple, and side of the head. These paroxysms came on at uncertain intervals; there was no distinct periodicity; the slightest cause would bring them on; they generally lasted from ten minutes to an hour or more. There was no swelling on the side of the face, neither was any increase of temperature observable. Pressure over the seat of pain seemed neither to increase nor diminish the suffering. She described a sensation of stiffness of the skin of the scalp and face of the affected side, and a sense of soreness when

closing the eye. General health good. No disturbance of the bowels. Appetite moderate. Tongue clean, but rather whiter on the right side. Sleeps well, when undisturbed by her tormentor.

Here the exciting cause of the *tie douloureux* was plainly apparent. It evidently depended on irritation of the superior maxillary nerve by diseased bone. The trunk of that nerve may also have been in a state of chronic inflammation from the same cause. *This cause could not be removed.*

Under these unpromising circumstances, I determined to try to allay the nervous excitement by an application to the part; for all internal remedies had been previously used without effect. I employed the *aneuralgieon*. I directed a stream of warm medicated vapour to the side of the head and face, into the meatus auditorius, and, by means of a curved tube, into the fistulous opening in the palate. This was continued for a quarter of an hour. I carefully watched the effect.

In a few minutes, my patient said that the stiffness of the skin, before alluded to, was leaving her. Gradually a dulness, or numbness, spread over the side of the face. Ulti-

mately drowsiness and faintness came on, with nausea, until she went off into a slight coma, during which the pupils were dilated, especially that on the right side. Mrs. M. was then removed to a sofa, and in a few minutes recovered her consciousness. *All pain was gone.*

July 20th.—The tic douloureux has scarcely, if at all, appeared since the last operation. Repeated the use of the aneuralgicon, but not to so great an extent. The same effects followed, but in a mitigated degree.

22nd.—Has had no return of the pain.

26th.—No return of the neuralgia.

Aug. 20th.—I hear, through Mr. Earles, that Mrs. M. has been perfectly free from tic douloureux since she submitted to the operation.

I have met this gentleman since, very lately, and he assures me that she still continues in the same happy condition. Cured.

That Mrs. M. will be free from attacks in future is more than I do, or have a right to, expect. Such an obvious and powerful exciting cause existing, it is only a source of wonder to myself that she should have remained so long without a return of the paroxysms. A temporary relief was all I antici-

pated, and the permanent benefit was equally unhopcd for and satisfactory.

CASE: *Tic Douloureux*.—Sarah P., cook in a gentleman's family in Woburn-square, now in Upper Wimpole-street, first came under my care in the early part of January, 1848.

She is a widow, fifty years of age, of leucopneumatic temperament, and sallow complexion. Her general health has been tolerably good, although subject to occasional attacks of bronchitis. No hereditary tendency to neuralgie, gouty, or rheumatic affections, can be traced, and her two children are free from them. Catamenia have left her some time.

More than twelve months since (Jan. 1848) she was attacked with neuralgia of the face. It came on suddenly without obvious cause. Had not previously suffered particularly from toothache, liver complaint, or derangement of the bowels. The tic douloureux has continued off and on ever since. Tried everything she could think of, or others could suggest. Has been under the care of several medical men, who prescribed iron, quinine, arsenic, croton oil, &c., all with little or no effect. Several teeth have been extracted, under the idea that

the complaint originated from caries of those organs. Their removal seemed rather to aggravate the disorder.

When I first saw S. P. on the 12th January, the following symptoms presented themselves. Great pain on the right side of the face, extending to the ear, lower jaw, and forehead. It was also very bad beneath the eye and in the upper lip. The patient described the pain as of a darting, digging character, sometimes so severe as to make her scream out in agony.

The physiognomy was very characteristic. As the slightest movement of the head or jaw would bring on instantly a violent paroxysm, these were kept rigidly and watchfully motionless. The lips were a little separated, and a handkerchief was held constantly below the mouth to catch the saliva, which flowed abundantly. A trembling motion could be observed in the upper lip, especially during a paroxysm; and this sometimes extended to the cheek, without producing any distortion of the features. The good woman said that she felt at these moments a sensation in her cheek as if the pendulum of a clock were there. The whole expression was that of alarm and anxiety.

The pain was not continuous; it came on in

paroxysms every five or ten minutes. When the fit was over, she felt very hungry, but was afraid to eat lest she should bring on a return of the agony. At times, the utterance of a word would bring on a paroxysm, but the least attempt to bite or masticate was sure to do so. The upper lip especially was so irritable, that the touch of a feather, or a breath of air falling upon it, would inflict torture. The patient had suffered much from loss of sleep. Latterly she had not slept at all.

Upon examination of the chest by the stethoscope, find the sounds of the heart normal. Some rhonchus and mucous râle in the right lung. Abdominal functions regular; bowels open; tongue clean, but rather white.

Here the *tic douloureux* was evidently seated principally in the terminal branches of the superior maxillary nerve; the mandibulolabralis, and some muscular twigs of the inferior maxillary; and the *pes anserinus* of the *portio dura*. No distinct cause could be discovered; but the disease may, I think, fairly be referred to the nature of her occupation—that of a cook. In preparing for dinner parties, she was sometimes exposed for hours to the most intense heats from the fire, during which

time she was generally covered with profuse perspiration. The head and face, of course, under these circumstances, were the parts most exposed, and therefore most likely to suffer.

Jan. 12th.—Applied the aneuralgicon to the side of the face and ear; injected a stream of vapour into the meatus auditorius. This was continued for about a quarter of an hour. Some giddiness ensued, and the patient became faint and nauseated.

13th.—Has slept well all night. Pain much relieved. Repeated the process.

14th, 15th, 16th.—The apparatus used daily. No medicine given. All pain has left the side of the face, but remains in the upper lip. Some little suffering is occasioned also when the patient opens her mouth wide, or bites any hard substance. The tongue is losing its feverish whiteness, and becoming moist and red.

21st.—Has had the vapour applied daily, not only in the ear, but along the course of the nerves in pain. No ill effect follows the application. At this date the patient says *she is quite well*. No motion whatever of the mouth will bring on the least pain or stiffness. She bites the hardest crusts with impunity. Cured.

About four months after the last date, S. P.

had a 'return of the tic douloureux. There was no very evident exciting cause. The attack was not quite so severe as the previous one, although seated in the same parts. The aneuralgicon was applied in the same manner, and dissipated the complaint completely in three days. The disease retreated step by step as before. None but a little aperient medicine was taken.

CASE. *Tic Douloureux*.—This was another instance of tic douloureux occurring in consequence of exposure to sudden change of temperature. It came under my notice also at the beginning of the year 1848.

Elizabeth V., cook in a gentleman's family in Woburn-place, is a widow, thirty-three years of age. Nervo-sanguineous temperament, costive habit of body, and a sufferer from dyspepsia. Catamenia regular. The history she gives of her neuralgie affection is this:—

She does not remember that either of her parents were troubled in the same way, but that she herself has had occasional attacks of it since she was ten years of age. These came on every November, and lasted for three months or more, during which time she suffered intense

agony. For six weeks together she has not been able to sleep in consequence. The *tic douloureux* had not troubled her for the last three years, until it returned in all its violence the previous winter. (This note was taken in January, 1848.) She supposed it to arise from a carious tooth, and had one extracted without benefit. Many medical men have prescribed for her, and latterly one of eminence in Oxford, (the late Mr. Parker.) Thinks they did her no good. Some of the remedies seemed to increase the ailment. Could not ascertain exactly all the medicines she had been taking, but knows that tonics, purgatives, and iodine, were among the number.

Saw E. V. on Jan. 7th, and ascertained that she was suffering from genuine *tic douloureux*. She had great agony in the face—a severe, darting, plunging pain, extending from the ear across the cheek—in fact, taking the course of the *portio dura* and *pes anserinus*. The terminal branches of the superior maxillary nerve beneath the eye were also affected. The pain was not continuous, but the paroxysms came on occasionally with perfect intermissions. The periodicity was not, however, by any means perfect. The attacks were not regular in their

onset, nor did they take any particular type. They seemed to be determined by slight and accidental causes. The patient states that when the pain has been greatest, she has found temporary relief by opening and shutting her mouth, or chewing strongly a hard crust. It seemed to deaden the pain. The complaint was seated on the left side.

The general health of E. V. was pretty good. She had little appetite, however, and the tongue was foul. Her bowels also were habitually constipated. She does not appear to be subject to rheumatism. Viscera of chest and abdomen healthy. Upon examination of the mouth, find several carious teeth, which I recommend to be extracted, as sources of irritation. Patient will not consent to this.

The exciting cause of the morbid irritation in the nerves of the face in this case, was, doubtless, exposure to sudden changes of temperature. When pursuing her avocation in the kitchen, over a roaring fire, she was in the habit of running up the area steps to answer the summonses of tradespeople. The carious teeth were also powerful predisposing causes. Still, as there was evidence of more disturbance of the primæ viæ than I have usually met with in

these cases, I determined to try the full effect of remedies directed to that quarter.

The bowels were therefore thoroughly unloaded by aperient medicines, with croton oil, and a course of alteratives and stomachics. This was persevered in for some days. The result was, improvement of the appetite and cleanness of the tongue, but the pain raged with equal severity. Quinine and arsenic were then tried with the same result, but seeming rather, in the opinion of the patient, to aggravate the symptoms, the carbonate of iron, in doses of a teaspoonful three times a day, was substituted. Little improvement followed. The sufferer's patience was becoming exhausted, so that on—

Feb. 1st.—I applied the anæsthetic to the seat of pain. A stream of warm sedative vapour was poured into the ear and on the side of the face, along the course of the nerves affected. The application was continued until the patient felt a glow in the ear, and she became somewhat sick and faint.

2nd.—Patient was sick after she got home. Pain much relieved; slept well during the night. To-day she complains of slight pains only in the course of the nerves.

9th.—Patient has not been able to attend regularly. The operation has only once been performed since the last date. Still the complaint is greatly mitigated, and she has good rest at night. The pain has entirely left the ear and cheek, and is centred only in the infra-orbital nerve. Aneuralgicon again applied.

17th.—Came to-day, to say that she has been quite well for the last week; has had no symptom of the complaint. Ordered to have the vapour applied as opportunity serves.

Saw E. V. several times during the succeeding three months; but she would not have the operation repeated, as she said it was unnecessary. No return of the complaint during that time. Cured.

CASE. *Tic Douloureux*.—While I resided in Harley-street, in September, 1848, Mrs. Harriet T., housekeeper to a family in the same street, was sent to me by a respectable chemist in the neighbourhood. She had suffered for a considerable time great agony in the right side of the face. This pain had all the characters of true tic douloureux, being sharp, piercing, or lancinating, and intermittent. It evidently occupied the terminal

branches of the superior maxillary nerve, but spread from thence occasionally to the forehead and ear. There was no particular heat or swelling of the surface, neither did pressure increase the suffering.

The patient could give no account of the origin of the affection, further than that it came on suddenly one morning, at about four o'clock, and had gradually increased in severity ever since. There was no regularity in the intermissions. Sometimes the disease would remain away for two or three weeks, and then suddenly return again with redoubled energy, as if it had acquired strength by the interval of rest. The patient put her finger accurately upon the infra-orbital foramen as the focus or centre of the nervous malady.

Upon a careful examination I could discover no sufficient exciting cause in the primæ viæ, liver, or cranium. The bowels were free, tongue clean, appetite good. I therefore directed my attention to the mouth. The patient said she had not suffered from toothache for years. The teeth in general were sound. Upon a close inspection of the gums, however, I discovered a small swelling immediately beneath the upper lip on the left side, with a

minute opening at the summit. Upon passing a probe into the aperture, it grated against a hard substance.

This I readily conjectured might be the *fons et origo* of the malady. I therefore immediately laid the tumour open with a scalpel, and had the satisfaction of dislodging the *root of a tooth*. Nature had been making such strenuous efforts to get rid of this, now useless, member, that the stump was completely *reversed* in its position, the point of the fang presenting at the orifice of the swelling.

With the removal of this extraneous body, the tumour subsided, and in a few days was completely healed. But I was mortified to find that the tic douloureux, which had evidently originated from it, remained nearly as bad as ever. It was one of those cases where the nervous irritation continues after the removal of the exciting cause. Paroxysms of agony would come on at uncertain intervals, and torment the patient as before.

To allay this morbid excitement, I applied the aneuralgicon to the parts. By means of the smaller cone, sedative vapour was passed upon the cheek, and for some time directly over the sub-orbital foramen. It had the effect

of soothing the nerves. The pain became less and less after each operation, so that when this had been repeated a few times, the neuralgie affection was completely subdued. Mrs. T. has had no return of the disease.

CASE. *Tic Douloureux*.—J. J., a tailor, residing in the neighbourhood of Carey-street, applied at the Metropolitan Free Hospital on the 19th of August, 1848. He is a tall, thin man, forty-five years of age, of meagre aspect and feeble constitution. About a twelvemonth previously was attacked with pain in the gums, and up the left side of the face. It came on suddenly, without exposure to cold, wet, or draught. It was, he said, as if knives were being driven into the cheek, or shocks of electricity passed through it. This continued off and on for three weeks. It then as suddenly left, returning and leaving at intervals. The present attack commenced about three weeks since; it came suddenly, without obvious cause.

Upon examination, observe an anxious countenance; left side of face drawn up a little; says the pain shoots up the cheek to the forehead, and towards the ear. Sometimes the eye is attacked, when there is an abundant flow

of tears. A brilliant light is noticed by the patient to pass occasionally from the angle of the left eye towards the ear. The muscles of the face are sometimes agitated. The suffering comes on in paroxysms, but there is always a dull aching deep in the cheek. The teeth always bad from dyspepsia and mercury; all the back ones are now decayed or decaying; has had several drawn for the toothache, or the complaint from which he is now suffering. Complains that the pain has greatly increased this and the previous day, but it is evidently not seated in the teeth.

There is tenderness of the skin of the chest, but the viscera are healthy. The bowels are costive, and he is much troubled with the thread worms; appetite good; tongue moist, and tolerably clean; circulation natural.

The neuralgia in this case could, I believe, be traced satisfactorily to the state of the teeth and the condition of the alimentary canal. Ordering the patient aperient medicine and an aloetic enema, I at once applied the aneuralgicon to the side of the face and ear. It had the effect of allaying the pain immediately.

Aug. 23rd.—Nearly well.

Two more applications completed the cure.

CASE. *Rheumatic Neuralgia* — Charles C., a compositor, aged thirty-two, applied at the Dispensary, August 23rd, 1848. He is a married man, of nervo-sanguineous temperament. Had had pain in the face six months. It came on first with a violent cold, caught by sleeping in a damp room. Has polypus of the nose, which he says is an hereditary complaint. Never was salivated, he believes, although he has had lues more than once; has a peculiar susceptibility to the influence of venereal complaints.

Symptoms.—Pain in the jaws of both sides, not continual, but coming on in paroxysms; a cramp pain, with burning heat extending from the cheeks to the side of the head; seems to run in lines along the course of the nerves; the crown of the head is very hot at times. The pain is not worse when warm in bed; it is worse as day advances. As he feels exhausted from work, the pain comes on, and in proportion to his weakness. Bowels relaxed; thinks he has inward piles; tongue always furred; appetite good; skin moist; some tenderness on pressure of the scalp. Ordered a brisk purgative, to be followed by colchicum in a mixture of magnesia.

Aug. 24th.—Symptoms much the same; the aneuralgieon applied.

31st.—Quite well.

This I take to have been a case of rheumatic neuralgia, or rheumatism of the nerves, and cold the exciting cause. Syphilis probably predisposed the system to the attack.

CASE. *Frontal Neuralgia*.—W. H., a brush-maker, aged thirty-six, residing in South Lambeth, came under my care on the 26th August, 1848. Has had frontal neuralgia full twenty years. It comes on three or four times every year, and lasts for three weeks or a month. It continues all day; comes on in the morning and leaves in the evening. It gradually steals on; commences with pain in the right eye; he knows what is coming. The eye "feels hot and dreadful sore;" a sharp plunging pain then begins over the right eye. The patient places his finger accurately over the supra-orbital notch as the source of the anguish. From thence it extends across to the other brow, and upwards to the forehead and vertex. Sometimes the pain is so violent that he does not know what to do. He is afraid to blow his nose at these times, for fear of bringing on

or increasing the agony. The bone feels sore after the attack. The eye waters much during the fits. Originally, it came on suddenly, without obvious cause. He was seized with the last attack when at work over pitch, heated on a charcoal fire. General health good; tongue clean; no sign of gastric disturbance.

The vapour applied to the brow and forehead.

Aug. 28th.—Very slight return of the pain since the operation. Repeated it. As I imagined the *tic douloureux* in this case might have arisen from malaria, I ordered two grains of quinine to be taken three times a day, in infusion of roses.

Under this combined treatment Mr. H. got quite well in a few days.

CASE. *Frontal Neuralgia*.—This was another instance of *tic douloureux*, brought on probably by the depressing effects of the influenza.

J. G., a journeyman cabinet-maker, aged 40, living near the reservoir of the New River, in Clerkenwell, came under my care at the Dispensary, on the 23rd September, 1848. He had the influenza the previous spring, since

which time has felt great depression of spirits, and flying pains about the body.

When I first saw him, J. G. complained of weakness. The least exertion made him perspire profusely. Excessive lowness of spirits, approaching to melancholy. Has nothing on his mind. Speaks reasonably on the subject. Has hallucinations, but knows them to be such. Always in dread and fear.

Has sharp pain over the right eye, which sometimes shoots to the back of the head and to the ear. There is always a slight uneasiness, but sometimes it amounts to agony. It is intermittent, but not regular in its accessions. Sometimes if he touches the nose, or blows it, the pain over the eye is brought on instantly. It is a darting, shooting pain. Tears run from the eye during the paroxysms. Conjunctiva sometimes bloodshot.

Appetite bad, especially of a morning. Tongue dry, but not foul. Thirsty. Bowels pretty regular. Urine high coloured, with deposit of copious white sediment. Pulse regular, 80.

The same treatment adopted as in the last case.

Sept. 27th.—Has not had the pain over the

eye since Sunday night. It gradually left. Still a certain heaviness remains over the forehead. His spirits are better. Some thirst and want of appetite remain.

30th.—Patient reports himself quite well.

CASE. *Tic Douloureux*.—Maria F., a poor woman, who gets her living by charring, resides in one of the small courts out of Clement's Lane. Applied for relief at the Metropolitan Free Hospital, in the early part of October, 1848. She is somewhat deaf, and came into the room crying and chattering at a great rate. The following note was then taken:—

Has been afflicted with tic douloureux in the face for some months. The disease was produced, she believes, by cold, caught when she was out washing. The place was cold and damp, and the window open. Pain commenced in the first molar tooth of lower jaw. Struck to side of face.

The pain is now seated over the malar bone of the left cheek, and reaches thence down the lower jaw, along the course of the inferior dental nerve, and up to the temple. Sometimes it extends backwards to the ear, the inside of which, at those times, burns like fire and

pains much. When the paroxysm comes on, it continues for half an hour or so and then ceases, to be renewed at intervals during the night and day. The intermissions are perfect, but irregular in their visits. Patient describes the pain as darting, lancinating. "Feels like a shock, as if a door were slammed suddenly and violently close to her head." Makes her start. During the fits the water runs from her mouth in a clear stream. Even this seems to pain and burn as it runs. There is no swelling of the face, but the poor woman cries out when the cheek or temple is touched. The slightest cause will bring on a paroxysm.

Patient has had toothache and bad teeth for years—mostly on the side affected. It is not exactly a tenderness, but touching the malar bone even with the point of the finger brings on a paroxysm. Health otherwise good. No sign of disturbance of the digestive apparatus. She is sometimes much pressed for food, but appetite always good. Bowels regular.

Medicine seemed to have little or no effect in controlling the agony or curing the disease.

Oct. 18th.—Applied the aneuralgicon with immediate relief.

22nd.—Repeated the operation. None but

a slight uneasy sensation remaining deep in the cheek. This was finally removed. The benefit I do not expect to be permanent, however, as the nervous excitement evidently depends upon the irritation of several carious teeth, which the patient will not consent to have removed.

The next case is one of great interest, not only from the singular relief afforded, but as proving that neuralgia of other parts of the body, besides the head, may be benefited by the aneuralgicon.

CASE.—Miss H., a lady, twenty-six years of age, residing in Camden Town, was placed under my care on the 5th of November, 1848. This note was then taken :—Patient a member of a remarkably healthy family, and of the nervo-sanguineous temperament. Has always been delicate and weakly. Latterly has been subject to debility, for which no evident cause could be assigned. The physicians of the metropolis who have prescribed for her at various times, could detect no symptoms of thoracic or abdominal disease. Those of Malvern and other provincial watering places were of the

same opinion. No functional disorder whatever. Still she declines.

The history of the young lady's neuralgic affection is this:—When only ten years of age, she had pains in the right knee. These were called “growing pains,” and therefore little regarded. Cannot recollect having fallen upon or struck the part.

When about eighteen she had a severe attack of pain in the same place. She was just recovering from this, when she went to reside at Genoa. Did not take care of herself in travelling, consequently when she arrived in Italy had severe pain, which did not subside until after the application of a succession of blisters. For six years after this it was quiescent. Returned to England, and had a severe attack soon afterwards. Has had it off and on for the last two years, in spite of every treatment.

Cold and wet always induce the attacks. They come on whenever she sits in wet clothes. One very severe attack was brought on by her running into the garden one evening in very thin shoes, while snow was on the ground. She has been subject to occasional *rheumatic pains* in various parts of

her body, and lately had them severely in the knee.

Upon examination find that the tic douloureux is seated on the anterior part of the leg, just below the right knee. It shoots from thence down to the ankles and great toe. It is on both sides of the tibia at present, but frequently is on one side only. Sometimes it occupies the ankles alone. The character of the pain is dull and aching generally, but paroxysms of sharp, piercing agony come on at intervals. These are so severe as to cause her to shriek out. The pain is not continuous; it comes on and goes off at uncertain intervals. It is *always worse at night*; cannot sleep for it. In fact, her rest is completely destroyed by the torment. There is some little thickening of the periosteum of the upper and front part of the tibia, and a degree of *tenderness on pressure*. Fluid can be readily detected in the knee-joint.

From the tenderness, the pain being worse when warm in bed, its origin from cold, and its complication with rheumatism—this was evidently a case of *rheumatic neuralgia*.

This young lady had been under the care of several eminent practitioners, both in town and

country, for this disease. The usual remedies for rheumatism had been repeatedly tried without effect. Blisters in rapid succession were applied to the part, without avail. Quinine and iron had been given in small and large quantities. Indeed, I was given to understand that the most gentle tonics of any kind produced fever and increase of suffering. The strength of Miss H. meantime visibly declined. Hectic fever set in, and the patient was considered by her friends to be rapidly sinking from the pain and want of rest.

Under these circumstances, I resolved to try the effect of topical remedies. The aneuralgicon, charged with belladonna and henbane, was applied to the leg, and the stream of vapour directed upon the ankles and dorsum of the foot. This was on the 5th of November.

Nov. 8th.—Has been more free from pain. Slept better at night. Repeated the application.

11th.—Much better up to yesternight, when she went out for a ride, and her feet were allowed to become cold. Applied aneuralgicon with quieting effect.

18th.—The neuralgia is but faintly perceived near the knee. It has left the ankles entirely.

The fluid in the joint is subsiding. Repeated operation.

22nd. — Much better in every respect. General health and strength much improved. Scarcely a trace of pain remains, and that evidently rheumatic. Sleeps well. Tongue clean. Appetite good. Patient is now able to bear small doses of the sulphate of iron and quinine, which will assist her recovery.

Dec. 13th.—Received the following account from the young lady herself, in answer to my note of inquiry. “I continue to improve in health and strength, and have almost forgotten all about the pain.” Very lately I have seen my fair patient. She is a different person altogether; quite healthy and robust. She has not had the slightest return of the neuralgia.

CASE. *Tic Douloureux and Facial Palsy*.—William R., aged forty-two, a porter, residing in the Seven Dials, applied at the Metropolitan Free Hospital on the 1st of November, 1848, for neuralgia, apparently of the portio dura. He is a stout man, of sanguine temperament, but in very indigent circumstances.

Patient says he has had occasional slight pain on the right side of the head for six months past.

About a fortnight or three weeks ago, it came on worse during the wet weather. From the nature of his occupation he is much exposed to wet. Got a cold from wet feet. The pain, which was sharp and piercing, came on gradually. He points, as the source of the agony, to the front of the ear. It shoots from thence upwards to the head, downwards to the neck, and forwards to the mouth and nose. There are intermissions to the suffering, but no regular periodicity. Has several carious teeth on the same side of the upper jaw, but they do not pain him. He has not suffered from toothache for years. There is some degree of swelling of the side of the jaw, and slight tenderness on pressure.

The aneuralgicon was used, and a mixture ordered containing iodide of potassium.

Nov. 7th.—The pain rapidly vanishing; but in proportion to its decrease palsy of the portio dura comes on. The features are now drawn to the opposite side. Cannot shut the right eye completely, and the globe is turned upwards. Ordered a mustard poultice to the cheek, blister behind the ear, and purgative medicine.

11th.—Improving. Less distortion of the

features, and more power over the muscles of expression. To continue.

18th.—He has almost entirely recovered the use of the muscles of the face. The tic douloureux, however, has returned in proportion. The aneuralgicon again applied occasionally.

27th.—No evidence of the palsy remaining, but inability to close the eye completely.

The pain has been entirely absent for some days.

CASE. *Tic Douloureux*—The following note was taken in November, 1848, when I first saw the patient:—

Mrs. B., a respectable married woman, keeping a dairy near Bedford-row, is fifty-five years of age. She is of strong, robust constitution, and sanguine temperament, the mother of eleven children. General health always good. About fourteen years ago had an attack of pain in the chin, which ran up the side of the head. Began every day at three in the afternoon. The doctors called it tic douloureux. Knows no reason or cause for it. Went to every medical man she knew. Got no relief. It came on suddenly and left as suddenly, after tormenting her in paroxysms for six

months. Had no return until two months back, when she was suddenly seized with the same kind of pain. It commenced at twelve o'clock one day, and returned regularly every day at the same hour, steadily increasing in intensity. There was no warning or previous illness. The pain generally lasts from twelve to five—sometimes longer. It seems to be principally seated in the mandibulo-labral nerve. Commences at the mental foramen, and goes right along the jaw and up to the right temple. Sometimes shoots to ear and within the ear. Occasionally the whole side of the face is affected.

The pain is not continuous, but comes on in paroxysms, which last five or ten minutes. Saliva then flows abundantly from the mouth. The pain is so sharp and plunging, that, in the words of the patient, "if you were to run a lance in, it could not be worse." Nearly all the teeth on that side of the jaw have fallen out since the neuralgia began. A lateral incisor is now protruding, and is tender to the touch. The other teeth seem sound. Has not suffered from toothache. General health good. No symptoms of abdominal derangement. Appetite good. Bowels regular. Tongue clean.

November 29th.—Applied the aneuralgicon, charged with the cannabis and belladonna. Pain much relieved. Some little sickness and giddiness induced. No medicine ordered.

Dec. 1st.—Has had scarcely any pain since. Repeated the operation.

11th.—As the patient did not come to report herself at my house, as she promised, called at her residence to ascertain the reason. Informed me she had been quite well ever since she had last seen me. A prescription I gave her she had not had prepared, as she thought it unnecessary. Cured.

CASE. *Rheumatic Neuralgia*.—J. E., a carpenter, aged 34, of meagre aspect, residing in Compton Street, applied for relief, August 9th, 1848.

Two months before felt a kind of lump on the right side of the head and a soreness. He is subject to rheumatism and dyspepsia. The pain gradually increased, and extended itself over the eye, on to the ball of the eye, the temple, and the ear. Says there is a constant dull pain in the scalp, but occasional paroxysms of intense darting, shooting, stabs along the course of the nerves. Also a darting pain in

the ear now and then, which continues about five minutes. The scalp is very sore and tender to the touch. The hair falls off there. Occasionally feels pain on the other side, and at the back of the neck. The pain is torture at times. Cannot sleep, and fears for his intellect. Is very weak. Bowels costive. Tongue dry and coated. Appetite bad.

As this seemed a case of rheumatic neuralgia depending on gastric disturbance, ordered four grains of calomel to be taken directly, and a teaspoonful of the following mixture two or three times a day :—Take of croton oil, 2 drops ; syrup, 1 oz. Mix.

Aug. 16th.—The medicine has acted thoroughly, with manifest improvement of the general health. Tongue cleaner. Appetite better. But no amendment of the local symptoms. To persevere.

30th.—General health now restored. Feels stronger and better, but still suffers awful agony in the head. Ordered to take the croton oil occasionally, and a mixture of colchicum, iodide of potassium, and magnesia, three times a day.

Sept. 14th.—No amendment. To take the carbonate of iron, in drachm doses, three times

a-day. Persevered for a fortnight with this remedy, but as it evidently exercised no influence over the complaint, began the use of the aneuralgicon on

Sept. 28th. Applied the vapour over the whole side of the head affected, especially the parts most in pain. It evidently relieved. Patient felt sickish before close of operation. Discontinued all medicine.

Oct. 1st.—Has been much easier ever since the operation; slept well; was rather giddy, however, the whole day after. The process to be repeated every other day.

4th.—Nearly well. By a few more applications, this patient was quite restored to health.

CASE. *Sciatica*. — T. P., Esq., a country gentleman, excessively devoted to field sports, consulted me at the early part of the present year. He is of robust frame and florid complexion. States that he caught a severe cold the previous summer, by walking through the bed of a trout stream while angling. This was accompanied by pains in the back and loins, which finally settled in the right hip. Suffered excruciating agony all the winter. Could not rest in bed. General health is giving way in

consequence. Has taken various medicines, and had blisters applied to the part. Thinks he derived a little relief from iodine. Some tenderness, on pressure, over the course of the sciatic nerve. The limb is somewhat wasted. Drags the right leg after him when walking.

Jan. 15th.—Applied the aneuralgicon to the parts in pain; used a high temperature along the course of the nerve.

17th & 20th.—Repeated the operation. All pain is gone; patient can move the limb freely. Cured.

LONDON:
SAVILL AND EDWARDS, PRINTERS, 4, CHANDOS STREET,
COVENT GARDEN.

